

December 23, 1957

Dr. Kenneth McQuillen  
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My dear McQuillen:

I was framing a rather more verbose reply to your letter of December when I realized that I was simply rehashing the arguments that I had stated in my earlier letter. The sum of them was and is that while I am quite sympathetic as to your aims and your factual critique that I can't help but feel that you are putting the cart before the horse in the present article. The content of your remarks seems to me such too cogent to warrant being tied to a purely terminological discussion. Given this there is no obvious reason why the note which you are submitting to Nature should appear over any signature other than your own. Indeed since there is no pleasant way to record the dissents, this type of procedure might seem to smack a little bit of self-elected legislation and the terminological aspects of the discussion seem to me too unimportant for such treatment. Perhaps I am reacting unduly strongly to the title rather than the text of the note.

Is there any remaining possibility of your considering an alternative course? One I would again earnestly recommend would be to embody the factual content of your criticism into a note over your own signature. This would constitute a constructive discussion of what your various cited authors appear to mean in their usage of the term protoplasts rather than the more negative criticism of their failure to abide by what you would consider the best usage. The terminological question ought then to be relegated to a final parenthesis. In any event my reluctance to add my signature should be construed as a reservation about this particular approach rather than hostility to your interpretation.

I think too that there is some advance in our understanding when we realize at least the kinship of L-forms with protoplasts and I hope that the precision that may be advanced by a definitive terminology will not obscure this interesting relationship.

I can fully sympathize with your difficulties in securing a measure of unanimity in the introduction of a new term. But this is a vice which attaches to any collective action and one may often find that in the course of trying to make too many compromises for a joint statement that an ineffective one may result. All in all, I see greater virtues in individual responsibility for scientific statements than in trying to obtain formal collective judgments.

I am in a little bit of a predicament with regard to the manuscript of which you have just been sent a copy. This is in too advanced a stage in press for it to be feasible to make a sweeping revision of the terminology even had I reached the point of decision where I might wish to do so. However I would be quite happy to append a final footnote referring to your terminological criticism if you can send me an adequate reference to it at your earliest convenience. I do not know whether there will be adequate time for such a step.

All in all as you can see I am much more concerned about the clarification of meaning in the usage of these terms than in the particular choice of the words. From this point of view your discussion may be most valuable in provoking our colleagues and myself to make as explicit as possible the meaning that they wish to attach to "Protoplast" and other similar terms. This is perhaps the most we can hope for. "Protoplast" is after all borrowed from another discipline, and considering that there still exists considerable controversy over the application of the word "cells" to bacteriology, you are bound to run into trouble. It is still an open question whether one should draw the homology between the cellulose walls of plant cells and of the polypeptide walls of bacteria or whether one should include in the latter all of the other constituents you mentioned. Perhaps the mistake is in trying to draw any analogy at all. A concept such as wall is however too homely to be thrown aside.

With all best regards,

Yours sincerely,

Joshua Lederberg  
Professor of Medical Genetics

JL/ew